



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

09/782,151

02/14/2001

Ralph E. Frazier

8605

2317

26884

7590

02/23/2004

PAUL W. MARTIN

LAW DEPARTMENT, WHQ-5E

1700 S. PATTERSON BLVD.

DAYTON, OH 45479-0001

EXAMINER

YIGDALL, MICHAEL J

ART UNIT

PAPER NUMBER

2122

DATE MAILED: 02/23/2004

9

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/782,151

Applicant(s)

FRAZIER, RALPH E.

Examiner

Michael J. Yigdal

Art Unit

2122

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 December 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 May 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. This Office action is in reply to applicant's response and amendment dated 17 December 2003. Claims 1-20 remain pending.

Specification

2. The attempt to incorporate subject matter into this application by reference to copending Application No. 09/782,150 is improper because the title of the reference is not "OPERATING SOFTWARE SCHEDULING PRIORITY RECORDER" as cited in the amended paragraph. The title of Application No. 09/782,150 is --OPERATING SOFTWARE PERFORMANCE MONITOR--.

Double Patenting

3. The provisional rejections to claims 1-20 under the judicially created doctrine of obviousness-type double patenting is withdrawn in view of the terminal disclaimer filed 17 December 2003 (Paper No. 8).

Claim Rejections - 35 USC § 103

4. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

5. Claims 1-4, 6-12 and 14-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Pat. No. 6,049,798 to Bishop et al. (hereinafter Bishop) in view of U.S. Pat. No. 5,590,056 to Barritz.

With respect to amended claim 1, Bishop discloses a method of capturing operating software scheduling information during execution of operating software (see the abstract, which shows the real-time capture of internal resource utilization data; note that CPU utilization data is considered a form of scheduling information), the method comprising the steps of:

(a) compiling operating software scheduling information capture software as part of the operating system (see column 11, lines 1-4, which shows the operating system service that is used to capture event traces related to processes; the step of compiling the software prior to its execution is inherent).

Bishop does not expressly disclose the limitation wherein the operating software scheduling information capture software is operative to record a history of the operating software events as they occur, information related to the history being organized and stored as operating software program scheduling information relating to interactions between the operating system software and each of the programs and tasks managed by the operating system software.

However, Bishop does show recording utilization data for a certain amount of time in order to provide past records (see column 22, lines 18-22). Bishop also shows identifying individual processes or tasks based on process ID and process name (see FIG. 13A).

Barritz discloses the limitation above in terms of monitoring events as they occur and recording an event history to a log (see FIG. 5 and column 6, lines 54-57), in which the recorded information comprises job-scheduling information for each module or task (see column 6, lines 58-64), for the purpose of enabling the identification of software usage patterns.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to extend the system of Bishop with the event history features taught by Barritz, for the purpose of enabling the identification of software usage patterns.

Bishop further discloses the steps of:

(b) invoking operating software scheduling information capture (see column 20, lines 55-67, and column 21, lines 1-4, which show a procedure for invoking the capture of performance data; note that this data includes CPU utilization, a form of scheduling information); and

(c) recording operating software scheduling information (see column 22, lines 18-22, which shows that the resource utilization data is recorded for a certain amount of time).

With respect to original claims 2-4, 6-12 and 14, see the rejections set forth in the Office action mailed 18 September 2003 (Paper No. 5), as Bishop further discloses the claimed limitations.

With respect to amended claim 15, Bishop discloses a method of capturing operating software scheduling information during execution of said operating software (see the abstract, which shows the real-time capture of internal resource utilization data; note that CPU utilization data is considered a form of scheduling information), wherein said method is performed using operating software scheduling information compiled and integrated with the operating software (see column 11, lines 1-4, which shows the operating system service that is used to capture event traces related to processes; the step of compiling the software prior to its execution is inherent), the method comprising the steps of:

(a) invoking operating software scheduling information capture software (see column 20, lines 55-67, and column 21, lines 1-4, which show a procedure for invoking the capture of performance data; note that this data includes CPU utilization, a form of scheduling information).

Bishop does not expressly disclose the limitation wherein the operating software scheduling information capture software is operative to record a history of the operating software events as they occur, the history being organized and stored as operating software program scheduling information relating to interactions between the operating system software and each of the programs and tasks managed by the operating system software.

However, Bishop does show recording utilization data for a certain amount of time in order to provide past records (see column 22, lines 18-22). Bishop also shows identifying individual processes or tasks based on process ID and process name (see FIG. 13A).

Barritz discloses the limitation above in terms of monitoring events as they occur and recording an event history to a log (see FIG. 5 and column 6, lines 54-57), in which the recorded information comprises job-scheduling information for each module or task (see column 6, lines 58-64), for the purpose of enabling the identification of software usage patterns.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to extend the system of Bishop with the event history features taught by Barritz, for the purpose of enabling the identification of software usage patterns.

Bishop further discloses the step of:

(b) recording operating software scheduling information (see column 22, lines 18-22, which shows that the resource utilization data is recorded for a certain amount of time).

With respect to original claims 16 and 17, see the rejections set forth in the Office action mailed 18 September 2003 (Paper No. 5), as Bishop further discloses the claimed limitations.

With respect to amended claim 18, Bishop discloses a computer system for capturing operating software scheduling information during execution of said operating software (see the abstract, which shows the real-time capture of internal resource utilization data; note that CPU utilization data is considered a form of scheduling information) comprising:

- (a) a processor for receiving and transmitting data (see item 190 of FIG. 14); and
- (b) a memory coupled to the processor, the memory having stored therein sequences of instructions which, when executed by the processor, cause the processor to invoke operating software scheduling information capture software, and to record operating software scheduling information (see item 194 of FIG. 14; also see column 16, lines 3-14, which shows the application programming interface that is used to invoke the data capture; note that the instructions are inherently stored in memory and executed by the processor).

Bishop does not expressly disclose the limitation wherein the operating software scheduling information capture software is operative to record a history of the operating software events as they occur, the history being organized and stored as operating software program scheduling information relating to interactions between the operating system software and each of the programs and tasks managed by the operating system software.

However, Bishop does show recording utilization data for a certain amount of time in order to provide past records (see column 22, lines 18-22). Bishop also shows identifying individual processes or tasks based on process ID and process name (see FIG. 13A).

Barritz discloses the limitation above in terms of monitoring events as they occur and recording an event history to a log (see FIG. 5 and column 6, lines 54-57), in which the recorded information comprises job-scheduling information for each module or task (see column 6, lines 58-64), for the purpose of enabling the identification of software usage patterns.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to extend the system of Bishop with the event history features taught by Barritz, for the purpose of enabling the identification of software usage patterns.

With respect to original claims 19 and 20, see the rejections set forth in the Office action mailed 18 September 2003 (Paper No. 5), as Bishop further discloses the claimed limitations.

6. Claims 5 and 13 are now rejected under 35 U.S.C. 103(a) as being unpatentable over Bishop in view of Barritz as applied to claim 1 above, and further in view of U.S. Pat. No. 5,870,604 to Yamagishi.

With respect to original claims 5 and 13, see the rejections set forth in the Office action mailed 18 September 2003 (Paper No. 5), as Yamagishi discloses the claimed limitations.

Response to Arguments

7. Applicant contends that the resource usage information provided by Bishop does not include a history of operating software events with information relating to the history being organized and stored as operating software program scheduling information relating to interactions between the operating system software and each of the programs and tasks managed by the operating system software, as recited in amended claims 1, 15 and 18 (see pages 8-9).

However, Barritz discloses monitoring events as they occur and recording an event history to a log, in which the recorded information comprises job-scheduling information for each module or task (see FIG. 5 and column 6, lines 54-64), as shown above.

Conclusion

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael J. Yigdall whose telephone number is (703) 305-0352. The examiner can normally be reached on Monday through Friday from 8:00am to 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tuan Q. Dam can be reached on (703) 305-4552. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

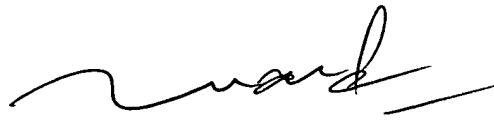
Art Unit: 2122

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MY

Michael J. Yigdall
Examiner
Art Unit 2122

mjy
February 11, 2004


TUAN DAM
SUPERVISORY PATENT EXAMINER